

## POLREP #6 AND FINAL REGIONAL ENTERPRISES SITE

410 WATER STREET

HOPEWELL, PRINCE GEORGE COUNTY, VA 23860

ATTENTION: DENNIS CARNEY, CHARLIE KLEEMAN, GREG CRYSTALL AND

STEPHEN LUFTIG

INFO: COMMANDER, FIFTH COAST GUARD DISTRICT

I. SITUATION: (1800 HRS THURSDAY, AUGUST 15,1991)

- A. 1620 HRS 13 AUG 91 AFTER ACHIEVING SITE STABILIZATION OSC KOOB DEFEDERALIZED SITE STABILIZATION ACTIVITIES WHICH INCLUDED THE TRANSFER OF WASTE/CRUDE OIL FROM STORAGE TANK #40 AND REMOVAL OF DILUTE SULFURIC ACID FROM AROUND THE BASE OF #40 TANK. DILUTED SULFURIC ACID RECOVERED BY RP CONTAINED IN SIX RAIL CARS AND FOUR TANK TRUCKS.
- B. 2300 HRS 13 AUG 91 ONE TANK TRUCK FAILED AT DISCHARGE VALVE AND DISCHARGED 1600 GALS OF SULFURIC ACID.
  DISCHARGED ACID WAS NEUTRALIZED. LEAKING TANK TRUCK WAS MOVED TO CONTAINMENT AREA AND REMAINING ACID DISCHARGED AND NEUTRALIZED SUCCESSFULLY.
- C. THREE TANK TRUCKS AND THREE RAIL CARS EVALUATED AND FOUND TO BE IN UNSATISFACTORY CONDITION. RP ARRANGED TO TRANSFER CONTENTS OF AFFECTED RAIL CARS AND TANK TRUCKS TO NEARBY GENERAL CHEMICAL PLANT (APX 1 MILE IN DISTANCE).
- D. OSC CONTINUES, ALONG STATE AND LOCAL REPS, TO MONITOR RP's EFFORTS.
- E. PERSONNEL ON SCENE:

EPA - 1

USCG - 2

VADES - 3

CITY OF HOPEWELL - 1

TAT - 2

REGIONAL ENTERPRISE

REPS AND CONTRACTORS - 12

E. WEATHER: SUNNY AND WARM TEMPS IN MID 90's

## II. ACTIONS TAKEN:

- A. 0930HRS: OH MATERIALS- RP CONTRACTOR COMMENCED NEUTRALIZATION OF ACID CONTAMINATED SOILS IN DIKED AREAS UTILIZING SODA ASH AND LIME.
- B. 1230HRS OSC EVALUATED SITE SAFETY ARRANGEMENTS EMPLOYED BY RP FOR TRANSFER OF ACID FROM AFFECTED RAIL CARS AND FOUND CONDITIONS UNACCEPTABLE. RP CORRECTED UNSAFE CONDITIONS AND RESUMED TRANSFER OPERATIONS UNDER STATE AND LOCAL OVERSIGHT.
  - C. 1720 HRS AFFECTED RAIL CARS AND TANK TRUCKS EMPTIED OF ACID. SITE RESTABILIZED.



## III. FUTURE PLANS:

- A. VADES IN CONJUNCTION WITH HOPEWELL FIRE MARSHALL'S OFFICE TO CONTINUE MONITORING CLEANUP EFFORTS BY RP
- B. OSC MANNING TO SUPERVISE FUTURE EPA ENFORCEMENT EFFORTS.
- C. ADDITIONAL FUNDING REQUEST DOCUMENT TO BE SUBMITTED 16 AUGUST 1991
- D. OSC KOOB TO CONTACT CAPTAIN OF THE PORT NORFOLK AND OFFER CONGRATULATIONS ON AN AGGRESSIVELY EXECUTED SUPPORT EFFORT WHICH ALLOWED FOR A SUCCESSFUL CONCLUSION TO THIS FEDERALIZED STABILIZATION ACTION. CAPT THORNTON'S EFFORTS AND THOSE OF CDR MURPHY, LCDR COOK, AND ENS LEONARD DEMONSTRATE THE EFFECTIVENESS OF PREPLANNING, INTERAGENCY COORDINATION AND THE WILLINGNESS TO "SHOOT FIRST". A SPECIAL NOTE TO BE MADE OF CPO KLINESFELTER'S OUTSTANDING ACTIONS IN THE EXECUTION OF FIELD ACTIVITIES.
  - E. "SEMPER PARATUS"

KEVIN KOOB OSC EPA REGION III PHILA PA

## Contingency plan for neutralizing weak sulfuric acid at Regional enterprises site, Hopewell, Virginia



situation: Approximately 110,000 gallons of weak sulfuric acid recovered from the dike around a leaking sulfuric acid storage tank at the regional enterprises facility located in hopewell, virginia were stored as a contingency measure in five rail cars each of approximately 18,000 gallon capacity and three tankers each approximately of 5,000 gallon capacity, as a contingency measure. The material was pumped out of the dike as an emergency measure to minimize its effect on a one million oil storage tank in the adjacent dike into which it migrated. The rail cars are rubber lined and tankers are of stainless steel construction. After approximately 24 hours of storage the bolt/gasket on one of the tankers failed causing a release of approximately 2,000 gallons of weak sulfuric acid. The tanker was unloaded into the dike around the oil storage (which was emptied) and neutralized using soda ash. On inspection another tank car and rail car are found leaking through the valve, creating another threat of a potential release of sulfuric acid into the atmosphere.

The contingency measures being considered are transferring the weak sulfuric acid to a facility that would accept it or neutralizing the same on site in a controlled fashion using soda ash or lime. This contingency plan addresses the controlled neutralization of the weak acid on site.

Neutralization of sulfuric acid using soda ash or lime is an exothermic reaction. The products of the reaction are sodium sulfate, water and carbon dioxide with soda ash and calcium sulfate and water with lime. The neutralization will be done in an earthen dike. Controlled quantities of weak acid and soda ash solution will be released into the dike from a remote point. This will reduce the chance of exposure of any personnel to any vapors or heat released during the reaction.

As an alternative preparing a bed of soda ash in the dike and releasing calculated quantity of waste sulfuric acid into the dike may also be considered.

The personnel transferring the acid and those who work near the neutralization pit will wear acid resistant personnel protective equipment.

The products of neutralization will be disposed of according to standard t&d practices.